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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/687,746 | ITO ET AL. | |
| | Examiner | Art Unit | |
| | Chad Dickerson | 2625 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *20 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-3,5-11 and 13-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-11 and 13-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *t*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see page 11, filed 10/22/2007, with respect to the claim objections have been fully considered and are persuasive. The objections of claims 1-18 have been withdrawn.

2. Applicant's arguments, see page 11, filed 10/22/2007, with respect to the 101 rejections have been fully considered and are persuasive. The 101 rejections of claims 16-18 have been withdrawn.

3. Applicant's arguments, see page 11, filed 10/22/2007, with respect to 112 2nd paragraph rejections have been fully considered and are persuasive. The 112 2nd paragraph rejections of claims 9-12, 14, 15 and 17 have been withdrawn.

4. Applicant's arguments with respect to claims 1-3, 5-11 and 13-18 have been considered but are moot in view of the new ground(s) of rejection. The Amendment to the claim necessitated the new ground(s) of rejection. The reference of Niikawa '500 is used below to cure any deficiencies in the rejection.

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 5-8, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtsuka '526 (US Pat No 6198526) in view of Niikawa (US Pat No 7042500).

Re claim 5: Ohtsuka '526 discloses an external operating apparatus connectable to a print system constructed by a host computer including at least a receiving unit for receiving image data and an interruption event, a display control unit for effecting a preview display in which a print setting instruction is reflected to the image data received by said receiving unit, a print control unit for generating print data corresponding to the print setting instruction and outputting the generated print data to a printer, and said printer, said apparatus comprising:

an operation panel which receives the print setting instruction from a user (i.e. in the system, the digital camera has an operational panel, which allows the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of printing or quantity of printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, lines 18-26 and col. 6, lines 1-56);

an operation panel controller for generating the interruption event corresponding to the print setting instruction each time the print setting instruction is made to said operation panel (i.e. each time the digital camera (3) is used to perform a certain

function, a signal is sent in the CPU of the digital camera system that corresponds to a certain function. This is clear in any computational device, that an interrupt, or signal of some kind, is generated that corresponds with a certain function in the system of a computational device. In the current example of the digital camera, when the function of setting a print necessity is made, a print flag is set to 1 each time a print necessity is made in regards to a picture desired to be printed. This is an example of generating an interruption event when an instruction is made at the digital camera. In regards to the instruction of the quantity of prints that is analogous to the print setting instruction, when the flag of the necessity of printing is set to 1, setting values relating the quantity or size of prints, are selected by a button on the digital camera each time this setting is desired. Once the key is pressed to select a certain setting, this generates an interrupt in the system of the camera signifying that the user has chosen a certain value or setting each time the value or setting is made at the digital camera (3); see fig. 1; col. 1, lines 18-26 and col. 6, lines 1-56);

reading means for reading out image data from a connected storage medium (i.e. once the print necessity and other settings are chosen, these settings are also stored as a predetermined number. The digital camera (3) is connected to the personal computer (4). The digital camera (3) generates an image file (9) that is input into the personal computer (4). This is an example a reading means that reads out image data from a storage medium since the information of the necessity of printing and other print settings are stored before these printing options and settings are sent to the personal computer (4) in an image file (9). Also, since the personal computer (4) also has an

operational panel that is able to manipulate the image file by configuring print settings through inputs in the system, the personal computer can also be considered as an external operation apparatus. The personal computer (4) can temporarily store the image file (9) and order file (10) and transfer this information to the order receiving apparatus (1). This is an example of having a means to transfer, or read out, image data that is stored in a storage medium; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33); and

transmitting means for transmitting the interruption event and the read-out image data (i.e. when the image file needs to be transmitted to the personal computer (4), this information is transmitted to the personal computer (4) by the digital camera (3). This may occur when the user wishes to perform an order form on the personal computer (4). When the personal computer (4) is considered as the external operating apparatus, the personal computer (4) can transmit the image file (9) along with the signal to instruct printing, or an interruption event, in order for the printing apparatus (2) to perform printing in the system; see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35-66, col. 9, lines 1, 2 and col. 10, lines 17-33).

However, Ohtsuka '526 fails to teach transmitting means for transmitting the interruption event and the read-out image data to said host computer.

However, this is well known in the art as evidenced by Niikawa ‘500. Niikawa ‘500 discloses transmitting means for transmitting the interruption event and the read-out image data to said host computer (i.e. in the system, the digital camera (1) an be connected to the PC (1000) and it is able to transmit image data read out from its

memory and an interruption event notifying the PC (1000) of the connection to the PC to the digital camera; see col. 6, line 46 – col. 8, line 8).

Therefore, in view of Niikawa ‘500, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a transmitting means for transmitting the interruption event and the read-out image data to said host computer in order to have a digital camera contain a communication interface to communicate with a PC (as stated in Niikawa ‘500 col. 6, lines 9-13).

Re claim 6: The teachings of Ohtsuka '526 and Niikawa ‘500 are disclosed above. Ohtsuka '526 discloses an apparatus, wherein said operation panel controller includes a start instructing unit for instructing a print start and generates the interruption event corresponding to the print start instruction (i.e. when the user desires to instruct a print to the printer, the user uses the function on the digital camera to set order information (7) in regards to the necessity of printing and sends this information to the printer through the personal computer (4). When the function changes a print flag to 1, this generates a signal, analogous to an interruption event, to correspond to the print instruction in order to instruct the printer to start printing once the order information (7) is received by the order receiving apparatus (1) and then to the printer (2); see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33).

Re claim 7: The teachings of Ohtsuka '526 and Niikawa ‘500 are disclosed above.

Ohtsuka '526 discloses an apparatus, wherein in response to the reception of the interruption event corresponding to the print start instruction, said print control unit outputs to said printer the print data to which the print setting instructions received by a plurality of interruption events received so far are reflected (i.e. when the printer receives the instruction to print an image by the print necessity flag equaling 1, the printer also recognizes the print settings relating to the print data in the image information (11) in the image file (9). The plurality of print settings is a plurality of signals recognized by the digital camera each time a different print setting is entered in the system. This is also the case for the personal computer (4), if the personal computer is used as the external operating apparatus that can have different print settings entered into the system through the personal computer (4). The order receiving apparatus (1) outputs the print data that reflects the print settings received by the order file (10) from the personal computer (4) through transmission and outputs this information to the printer (2); see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35-66, col. 9, lines 1, 2 and col. 10, lines 17-33).

Re claim 8: The teachings of Ohtsuka '526 and Niikawa ‘500 are disclosed above. Ohtsuka '526 discloses an apparatus, wherein the print setting instruction corresponding to the interruption event which is generated every operation to the operation panel (i.e. the print setting in Ohtsuka '526 corresponds to a signal, or an interruption event, that is generated every time an operation of choosing a specific print setting is performed on the digital camera using the function. With the selected key button on the digital camera

and a function used to select different print settings, it is clear that an operation panel is on the digital camera, since the camera can select print settings from a plurality of selections; see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35-66, col. 9, lines 1, 2 and col. 10, lines 17-33).

However, Ohtsuka '526 fails to teach host computer updates said preview display in accordance with the print setting.

However, this is well known in the art as evidenced by Niikawa '500. Niikawa '500 discloses the host computer updates said preview display in accordance with the print setting (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images; see fig. 12; col. 9, lines 12-41).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have a host computer update the preview display in accordance with the print setting in order to incorporated in the device of Ohtsuka '526, as combined with the features of Nishio '346, in order to have a user confirm an image on a display of an image processing apparatus sent from a digital camera (as stated in Niikawa '500 col. 2, lines 8-16).

Re claim 14: Ohtsuka '526 discloses a method of controlling an external operating apparatus connectable to a print system constructed by a host computer including at least a receiving unit for receiving image data and an interruption event, a display control unit for effecting a preview display in which a print setting instruction is reflected

to the image data received by said receiving unit, a print control unit for generating print data corresponding to the print setting instruction and outputting the generated print data to a printer, and said printer, said method comprising the steps of:

receiving by an operation panel the print setting instruction from the user (i.e. in the system, the digital camera has an operational panel, which allows the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of printing or quantity of printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, lines 18-26 and col. 6, lines 1-56);

generating the interruption event corresponding to the print setting instruction each time the print setting instruction is made to said operation panel in said receiving step (i.e. each time the digital camera (3) is used to perform a certain function, a signal is sent in the CPU of the digital camera system that corresponds to a certain function. This is clear in any computational device, that an interrupt, or signal of some kind, is generated that corresponds with a certain function in the system of a computational device. In the current example of the digital camera, when the function of setting a print necessity is made, a print flag is set to 1 each time a print necessity is made in regards to a picture desired to be printed. This is an example of generating an interruption event when an instruction is made at the digital camera. In regards to the instruction of

the quantity of prints that is analogous to the print setting instruction, when the flag of the necessity of printing is set to 1, setting values relating the quantity or size of prints, are selected by a button on the digital camera each time this setting is desired. Once the key is pressed to select a certain setting, this generates an interrupt in the system of the camera signifying that the user has chosen a certain value or setting each time the value or setting is made at the digital camera (3) and the value or setting is stored; see fig. 1; col. 1, lines 18-26 and col. 6, lines 1-56);

reading out image data from a connected storage medium (i.e. once the print necessity and other settings are chosen, these settings are also stored as a predetermined number. The digital camera (3) is connected to the personal computer (4). The digital camera (3) generates an image file (9) that is input into the personal computer (4). This is an example a reading means that reads out image data from a storage medium since the information of the necessity of printing and other print settings are stored before these printing options and settings are sent to the personal computer (4) in an image file (9). Also, since the personal computer (4) also has an operational panel that is able to manipulate the image file by configuring print settings through inputs in the system, the personal computer can also be considered as an external operation apparatus. The personal computer (4) can temporarily store the image file (9) and order file (10) and transfer this information to the order receiving apparatus (1). This is an example of having a means to transfer, or read out, image data that is stored in a storage medium; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33); and

transmitting the interruption event and the read-out image data (i.e. when the image file needs to be transmitted to the personal computer (4), this information is transmitted to the personal computer (4) by the digital camera (3). This may occur when the user wishes to perform an order form on the personal computer (4). When the personal computer (4) is considered as the external operating apparatus, the personal computer (4) can transmit the image file (9) along with the signal to instruct printing, or an interruption event, in order for the printing apparatus (2) to perform printing in the system; see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35-66, col. 9, lines 1, 2 and col. 10, lines 17-33).

However, Ohtsuka '526 fails to teach transmitting means for transmitting the interruption event and the read-out image data to said host computer.

However, this is well known in the art as evidenced by Niikawa '500. Niikawa '500 discloses transmitting means for transmitting the interruption event and the read-out image data to said host computer (i.e. in the system, the digital camera (1) an be connected to the PC (1000) and it is able to transmit image data read out from its memory and an interruption event notifying the PC (1000) of the connection to the PC to the digital camera; see col. 6, line 46 – col. 8, line 8).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a transmitting means for transmitting the interruption event and the read-out image data to said host computer in order to have a digital camera contain a communication interface to communicate with a PC (as stated in Niikawa '500 col. 6, lines 9-13).

Re claim 17: Ohtsuka '526 discloses a program stored on a computer-readable recording medium, for causing a computer to execute a method of controlling an external operating apparatus connectable to a print system constructed by a host computer including at least a receiving unit for receiving image data and an interruption event, a display control unit for effecting a preview display in which a print setting instruction is reflected to the image data received by said receiving unit, and a print control unit for generating print data corresponding to the print setting instruction and outputting the generated print data to a printer, and said printer, said method comprising the steps of:

receiving by an operation panel the print setting instruction from a user (i.e. in the system, the digital camera has an operational panel, which allows the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of printing or quantity of printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, lines 18-26 and col. 6, lines 1-56);

generating the interruption event corresponding to the print setting instruction each time the print setting instruction is made to said operation panel in said receiving step (i.e. each time the digital camera (3) is used to perform a certain function, a signal

is sent in the CPU of the digital camera system that corresponds to a certain function. This is clear in any computational device, that an interrupt, or signal of some kind, is generated that corresponds with a certain function in the system of a computational device. In the current example of the digital camera, when the function of setting a print necessity is made, a print flag is set to 1 each time a print necessity is made in regards to a picture desired to be printed. This is an example of generating an interruption event when an instruction is made at the digital camera. In regards to the instruction of the quantity of prints that is analogous to the print setting instruction, when the flag of the necessity of printing is set to 1, setting values relating the quantity or size of prints, are selected by a button on the digital camera each time this setting is desired. Once the key is pressed to select a certain setting, this generates an interrupt in the system of the camera signifying that the user has chosen a certain value or setting each time the value or setting is made at the digital camera (3) and the value or setting is stored; see fig. 1; col. 1, lines 18-26 and col. 6, lines 1-56);

reading out image data from a connected storage medium (i.e. once the print necessity and other settings are chosen, these settings are also stored as a predetermined number. The digital camera (3) is connected to the personal computer (4). The digital camera (3) generates an image file (9) that is input into the personal computer (4). This is an example a reading means that reads out image data from a storage medium since the information of the necessity of printing and other print settings are stored before these printing options and settings are sent to the personal computer (4) in an image file (9). Also, since the personal computer (4) also has an

operational panel that is able to manipulate the image file by configuring print settings through inputs in the system, the personal computer can also be considered as an external operation apparatus. The personal computer (4) can temporarily store the image file (9) and order file (10) and transfer this information to the order receiving apparatus (1). This is an example of having a means to transfer, or read out, image data that is stored in a storage medium; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33); and

transmitting the interruption event and the read-out image data (i.e. when the image file needs to be transmitted to the personal computer (4), this information is transmitted to the personal computer (4) by the digital camera (3). This may occur when the user wishes to perform an order form on the personal computer (4). When the personal computer (4) is considered as the external operating apparatus, the personal computer (4) can transmit the image file (9) along with the signal to instruct printing, or an interruption event, in order for the printing apparatus (2) to perform printing in the system; see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35-66, col. 9, lines 1, 2 and col. 10, lines 17-33).

However, Ohtsuka '526 fails to teach transmitting means for transmitting the interruption event and the read-out image data to said host computer.

However, this is well known in the art as evidenced by Niikawa ‘500. Niikawa ‘500 discloses transmitting means for transmitting the interruption event and the read-out image data to said host computer (i.e. in the system, the digital camera (1) an be connected to the PC (1000) and it is able to transmit image data read out from its

memory and an interruption event notifying the PC (1000) of the connection to the PC to the digital camera; see col. 6, line 46 – col. 8, line 8).

Therefore, in view of Niikawa ‘500, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a transmitting means for transmitting the interruption event and the read-out image data to said host computer in order to have a digital camera contain a communication interface to communicate with a PC (as stated in Niikawa ‘500 col. 6, lines 9-13).

7. Claims 1-4, 9-13, 15, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtsuka '526 in view of Nishio '346 (US Pub No 2002/0196346) and Niikawa ‘500.

Re claim 1: Ohtsuka '526 discloses a method and apparatus for recording order information,

wherein said external operating apparatus comprises

an operation panel which receives a print setting instruction from the user (i.e. in the system, the digital camera has an operational panel, which allows the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of printing or quantity of printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, lines 18-26 and col. 6, lines 1-56),

an operation panel controller for generating an interruption event corresponding to the print setting instruction each time the print setting instruction is made to said operation panel (i.e. each time the digital camera (3) is used to perform a certain function, a signal is sent in the CPU of the digital camera system that corresponds to a certain function. This is clear in any computational device, that an interrupt, or signal of some kind, is generated that corresponds with a certain function in the system of a computational device. In the current example of the digital camera, when the function of setting a print necessity is made, a print flag is set to 1 each time a print necessity is made in regards to a picture desired to be printed. This is an example of generating an interruption event when an instruction is made at the digital camera. In regards to the instruction of the quantity of prints that is analogous to the print setting instruction, when the flag of the necessity of printing is set to 1, setting values relating the quantity or size of prints, are selected by a button on the digital camera each time this setting is desired. Once the key is pressed to select a certain setting, this generates an interrupt in the system of the camera signifying that the user has chosen a certain value or setting each time the value or setting is made at the digital camera (3) and the value or setting is stored; see fig. 1; col. 1, lines 18-26 and col. 6, lines 1-56), and

reading means for reading out image data from a storage medium (i.e. once the print necessity and other settings are chosen, these settings are also stored as a predetermined number. The digital camera (3) is connected to the personal computer (4). The digital camera (3) generates an image file (9) that is input into the personal computer (4). This is an example a reading means that reads out image data from a

storage medium since the information of the necessity of printing and other print settings are stored before these printing options and settings are sent to the personal computer (4) in an image file (9). Also, since the personal computer (4) also has an operational panel that is able to manipulate the image file by configuring print settings through inputs in the system, the personal computer can also be considered as an external operation apparatus. The personal computer (4) can temporarily store the image file (9) and order file (10) and transfer this information to the order receiving apparatus (1). This is an example of having a means to transfer, or read out, image data that is stored in a storage medium; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33),

wherein said host computer comprises

a receiving unit for receiving the image data read out from said storage medium (i.e. in the system both the personal computer (4) and the order receiving apparatus (1) can be considered as a host computer. The personal computer (4) is able to receive image data that is transmitted from the digital camera. The input from the digital camera relates to information that was stored as a predetermined value before the information was transmitted to the personal computer (4). Also, in regards to the order receiving apparatus, the order receiving apparatus (1) receives image data read out from a storage medium (5) that stores the image data, order information and the print necessity flag that signifies if printing is needed. In the method of using the order receiving apparatus (1), instead of using the storage medium (5), the image data can be

transmitted from a storage medium that temporarily stores the image data; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33), and

a print control unit for generating print data corresponding to the print setting instruction (i.e. the order information instructs the printer to generate print data corresponding to the order information (12) specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33), and

wherein said printer prints the print data output from said host computer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33).

However, Ohtsuka '526 fails to teach a display control unit and effecting a preview display.

However, this is well known in the art as evidenced by Nishio '346. Nishio '346 discloses a display control unit (i.e. in Nishio '346, the CPU (150) performs image processing on an image, based on image processing control information and outputs

information to a monitor. The CPU (150) controls whether the monitor (14) will display the processed information since it controls the transmission on the image information to the monitor (14); see paragraphs [0004], [0035] and [0058]-[0060]) and effecting a preview display (i.e. the CPU (150) transmits, or outputs, processed image data to a monitor (14) in order to be shown to the user, or preview displayed. In the background of the invention, in order to confirm the result of image processing, the image is preview displayed, or simply displayed on a CRT display to the user. With the incorporation of the CPU (150) that controls the output of the image to the monitor (14) and the display of an image to confirm the result of image processing of Nishio '346 combined with the features of Ohtsuka '526, the above claim feature is performed; see figs. 1, 2 and 6; see paragraphs [0004], [0035] and [0058]-[0060]).

Therefore, in view of Nishio '346, it would have been obvious to one of ordinary skill at the time the invention was made to have a display control unit and effecting a preview display in order to confirm the result of image processing by displaying the image processed (as stated in Nishio '346 paragraph [0004).

However, Ohtsuka ‘526 in view of Nishio ‘346 fails to teach a display control unit for receiving the interruption event from said external operating apparatus and effecting a preview display in which said print setting instruction is reflected to the image data received by said receiving unit, an updating unit for updating the preview display in accordance with a change of the print setting corresponding to the interruption event received from said external operating apparatus.

However, this is well known in the art as evidenced by Niikawa '500. Niikawa '500 discloses a display control unit for receiving the interruption event from said external operating apparatus (i.e. in the system, the CPU of the PC (1000) is used to accept a connection of the digital camera to the PC, considered as an interruption event since driver software on the computer automatically detects the camera's connection and displays the camera's user interface on the computer's monitor; see col. 6, line 55 – col. 7, line 41) and effecting a preview display in which said print setting instruction is reflected to the image data received by said receiving unit (i.e. in figure 12, the color balance is adjusted by receiving instructions that change the printing settings of the image data in the PC. The display of the computer is updated with the changing of the attributes of the image and the image is confirmed on the monitor of the PC; see col. 9, lines 12-41),

an updating unit for updating the preview display in accordance with a change of the print setting (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images; see fig. 12; col. 9, lines 12-41) corresponding to the interruption event received from said external operating apparatus (i.e. the print setting that is changed in the system corresponds to the image data and the data connection detection of the camera to the PC. Therefore, the change of the image data settings that can be printed corresponds to the image data sent to the PC in the data connection; see col. 9, lines 12-41).

Therefore, in view of Niikawa ‘500, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a display control unit for receiving the interruption event from said external operating apparatus and effecting a preview display in which said print setting instruction is reflected to the image data received by said receiving unit, an updating unit for updating the preview display in accordance with a change of the print setting corresponding to the interruption event received from said external operating apparatus incorporated in the device of Ohtsuka ‘526, as combined with the features of Nishio ‘346, in order to have a user confirm an image on a display of an image processing apparatus sent from a digital camera (as stated in Niikawa ‘500 col. 2, lines 8-16).

Re claim 2: The teachings of Ohtsuka '526 in view of Nishio '346 and Niikawa ‘500 are disclosed above.

Ohtsuka '526 discloses a system, wherein said operation panel controller includes a start instructing unit for instructing a print start and generates the interruption event according to the print start instruction (i.e. when the user desires to instruct a print to the printer, the user uses the function on the digital camera to set order information (7) in regards to the necessity of printing and sends this information to the printer through the personal computer (4). When the function changes a print flag to 1, this generates a signal, analogous to an interruption event, to correspond to the print instruction in order to instruct the printer to start printing once the order information (7) is received by the

order receiving apparatus (1) and then to the printer (2); see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33).

Re claim 3: The teachings of Ohtsuka '526 in view of Nishio '346 and Niikawa '500 are disclosed above.

Ohtsuka '526 discloses a system, wherein in response to the reception of the interruption event corresponding to said print start instruction, said print control unit outputs to said printer the print data to which the print setting instructions received by a plurality of interruption events received so far are reflected to said printer (i.e. when the printer receives the instruction to print an image by the print necessity flag equaling 1, the printer also recognizes the print settings relating to the print data in the image information (11) in the image file (9). The plurality of print settings is a plurality of signals recognized by the digital camera each time a different print setting is entered in the system. This is also the case for the personal computer (4), if the personal computer is used as the external operating apparatus that can have different print settings entered into the system through the personal computer (4). The order receiving apparatus (1) outputs the print data that reflects the print settings received by the order file (10) from the personal computer (4) through transmission and are outputs this information to the printer (2); see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35-66, col. 9, lines 1, 2 and col. 10, lines 17-33).

Re claim 9: Ohtsuka '526 discloses an information processing apparatus which can communicate with an external operating apparatus including an operation panel which receives a print setting instruction from a user, an operation panel controller for generating an interruption event corresponding to the print setting instruction each time the print setting instruction is made to said operation panel, [[and]] reading means for reading out image data from a connected storage medium, and a printer, said apparatus comprising:

a receiving unit for receiving the image data and the interruption event (i.e. the order receiving unit (1), which receives image data, also receives a signal of an event to represent the printing of data and either to print or not to print the print data that is input into the system. The flag or signal indicating to print is analogous to an interruption event that causes an a specific action to occur in the system; see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35-66, col. 9, lines 1, 2 and col. 10, lines 17-33); and

a print control unit for generating print data corresponding to the print setting instruction (i.e. the order information instructs the printer to generate print data corresponding to the order information (12) specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33) and

outputting the generated print data to said printer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33).

However, Ohtsuka '526 fails to teach a display control unit for effecting a preview display.

However, this is well known in the art as evidenced by Nishio '346. Nishio '346 discloses a display control unit (i.e. in Nishio '346, the CPU (150) performs image processing on an image, based on image processing control information and outputs information to a monitor. The CPU (150) controls whether the monitor (14) will display the processed information since it controls the transmission on the image information to the monitor (14); see paragraphs [0004], [0035] and [0058]-[0060]) for effecting a preview display (i.e. the CPU (150) transmits, or outputs, processed image data to a monitor (14) in order to be shown to the user, or preview displayed. In the background of the invention, in order to confirm the result of image processing, the image is preview displayed, or simply displayed on a CRT display to the user. With the incorporation of the CPU (150) that controls the output of the image to the monitor (14) and the display of an image to confirm the result of image processing of Nishio '346 combined with the

features of Ohtsuka '526, the above claim feature is performed; see figs. 1, 2 and 6; see paragraphs [0004], [0035] and [0058]-[0060]).

Therefore, in view of Nishio '346, it would have been obvious to one of ordinary skill at the time the invention was made to have a display control unit for effecting a preview display in order to confirm the result of image processing by displaying the image processed (as stated in Nishio '346 paragraph [0004).

However, Ohtsuka ‘526 and Nishio ‘346 fails to teach a display control unit for effecting a preview display in which said print setting instruction is reflected to the image data received by said receiving unit; and said print control unit updating the preview display in accordance with a change of the print setting corresponding to the interruption event received from said external operating apparatus.

However, this is well known in the art as evidenced by Niikawa ‘500. Niikawa ‘500 discloses a display control unit for effecting a preview display in which said print setting instruction is reflected to the image data (i.e. in figure 12, the color balance is adjusted by receiving instructions that change the printing settings of the image data in the PC. The display of the computer is updated with the changing of the attributes of the image and the image is confirmed on the monitor of the PC; see col. 9, lines 12-41) received by said receiving unit (i.e. in the system, the CPU of the PC (1000) is used to accept a connection of the digital camera to the PC, considered as an interruption event since driver software on the computer automatically detects the camera’s connection and displays the camera’s user interface on the computer’s monitor; see col. 6, line 55 – col. 7, line 41); and

said print control unit updating the preview display in accordance with a change of the print setting (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images; see fig. 12; col. 9, lines 12-41) corresponding to the interruption event received from said external operating apparatus (i.e. the print setting that is changed in the system corresponds to the image data and the data connection detection of the camera to the PC. Therefore, the change of the image data settings that can be printed corresponds to the image data sent to the PC in the data connection; see col. 9, lines 12-41).

Therefore, in view of Niikawa ‘500, it would have been obvious to one of ordinary skill at the time the invention was made to the feature of a display control unit for effecting a preview display in which said print setting instruction is reflected to the image data received by said receiving unit and said print control unit updating the preview display in accordance with a change of the print setting corresponding to the interruption event received from said external operating apparatus incorporated in the device of Ohtsuka ‘526, as combined with the features of Nishio ‘346, in order to have a user confirm an image on a display of an image processing apparatus sent from a digital camera (as stated in Niikawa ‘500 col. 2, lines 8-16).

Re claim 10: The teachings of Ohtsuka '526 in view of Nishio '346 and Niikawa ‘500 are disclosed above.

Ohtsuka '526 discloses an apparatus, wherein said operation panel controller includes a start instructing unit for instructing a print start and generates the interruption event corresponding to the print start instruction (i.e. when the user desires to instruct a print to the printer, the user uses the function on the digital camera to set order information (7) in regards to the necessity of printing and sends this information to the printer through the personal computer (4). When the function changes a print flag to 1, this generates a signal, analogous to an interruption event, to correspond to the print instruction in order to instruct the printer to start printing once the order information (7) is received by the order receiving apparatus (1) and then to the printer (2); see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33).

Re claim 11: The teachings of Ohtsuka '526 in view of Nishio '346 and Niikawa '500 are disclosed above.

Ohtsuka '526 discloses an apparatus, wherein in response to the reception of the interruption event corresponding to the print start instruction, said print control unit outputs to said printer the print data to which the print settings received by a plurality of interruption events received so far is reflected (i.e. when the printer receives the instruction to print an image by the print necessity flag equaling 1, the printer also recognizes the print settings relating to the print data in the image information (11) in the image file (9). The plurality of print settings is a plurality of signals recognized by the digital camera each time a different print setting is entered in the system. This is also

the case for the personal computer (4), if the personal computer is used as the external operating apparatus that can have different print settings entered into the system through the personal computer (4). The order receiving apparatus (1) outputs the print data that reflects the print settings received by the order file (10) from the personal computer (4) through transmission and are outputs this information to the printer (2); see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35-66, col. 9, lines 1, 2 and col. 10, lines 17-33).

Re claim 13: Ohtsuka '526 discloses a method of controlling a print system comprising an external operating apparatus, a host computer which communicates with said external operating apparatus, and a printer which communicates with said host computer,

wherein said method includes a control method for said external operating apparatus, comprising the steps of:

receiving by an operation panel a print setting instruction from the user (i.e. in the system, the digital camera has an operational panel, which allows the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of printing or quantity of

printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, lines 18-26 and col. 6, lines 1-56);

generating an interruption event corresponding to the print setting instruction each time the print setting instruction is made to said operation panel (i.e. each time the digital camera (3) is used to perform a certain function, a signal is sent in the CPU of the digital camera system that corresponds to a certain function. This is clear in any computational device, that an interrupt, or signal of some kind, is generated that corresponds with a certain function in the system of a computational device. In the current example of the digital camera, when the function of setting a print necessity is made, a print flag is set to 1 each time a print necessity is made in regards to a picture desired to be printed. This is an example of generating an interruption event when an instruction is made at the digital camera. In regards to the instruction of the quantity of prints that is analogous to the print setting instruction, when the flag of the necessity of printing is set to 1, setting values relating the quantity or size of prints, are selected by a button on the digital camera each time this setting is desired. Once the key is pressed to select a certain setting, this generates an interrupt in the system of the camera signifying that the user has chosen a certain value or setting each time the value or setting is made at the digital camera (3) and the value or setting is stored; see fig. 1; col. 1, lines 18-26 and col. 6, lines 1-56); and

reading out image data from a storage medium (i.e. once the print necessity and other settings are chosen, these settings are also stored as a predetermined number. The digital camera (3) is connected to the personal computer (4). The digital camera

(3) generates an image file (9) that is input into the personal computer (4). This is an example a reading means that reads out image data from a storage medium since the information of the necessity of printing and other print settings are stored before these printing options and settings are sent to the personal computer (4) in an image file (9). Also, since the personal computer (4) also has an operational panel that is able to manipulate the image file by configuring print settings through inputs in the system, the personal computer can also be considered as an external operation apparatus. The personal computer (4) can temporarily store the image file (9) and order file (10) and transfer this information to the order receiving apparatus (1). This is an example of having a means to transfer, or read out, image data that is stored in a storage medium; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33),

wherein said method further includes a control method for said host computer, comprising the steps of

receiving the image data read out from said storage medium (i.e. in the system both the personal computer (4) and the order receiving apparatus (1) can be considered as a host computer. The personal computer (4) is able to receive image data that is transmitted from the digital camera. The input from the digital camera relates to information that was stored as a predetermined value before the information was transmitted to the personal computer (4). Also, in regards to the order receiving apparatus, the order receiving apparatus (1) receives image data read out from a storage medium (5) that stores the image data, order information and the print necessity

flag that signifies if printing is needed. In the method of using the order receiving apparatus (1), instead of using the storage medium (5), the image data can be transmitted from a storage medium that temporarily stores the image data; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33), and

generating print data corresponding to the print setting instruction (i.e. the order information instructs the printer to generate print data corresponding to the order information (12) specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33), and

wherein said method further includes a control method for said printer by which said printer prints printing data output from said host computer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33).

However, Ohtsuka '526 fails to teach effecting a preview display.

However, this is well known in the art as evidenced by Nishio '346. Nishio '346 discloses effecting a preview display (i.e. the CPU (150) transmits, or outputs, processed image data to a monitor (14) in order to be shown to the user, or preview displayed. In the background of the invention, in order to confirm the result of image processing, the image is preview displayed, or simply displayed on a CRT display to the user. With the incorporation of the CPU (150) that controls the output of the image to the monitor (14) and the display of an image to confirm the result of image processing of Nishio '346 combined with the features of Ohtsuka '526, the above claim feature is performed; see figs. 1, 2 and 6; see paragraphs [0004], [0035] and [0058]-[0060]).

Therefore, in view of Nishio '346, it would have been obvious to one of ordinary skill at the time the invention was made to effect a preview display in order to confirm the result of image processing by displaying the image processed (as stated in Nishio '346 paragraph [0004).

However, Ohtsuka ‘526 in view of Nishio ‘346 fails to teach receiving the interruption event from said external operating apparatus and effecting a display in which said print setting instruction is reflected to the image data received in said image data receiving step, and updating the preview display in accordance with a change of image setting. corresponding to the interruption event received from said external operating apparatus.

However, this is well known in the art as evidenced by Niikawa ‘500. Niikawa ‘500 discloses receiving the interruption event from said external operating apparatus (i.e. in the system, the CPU of the PC (1000) is used to accept a connection of the

digital camera to the PC, considered as an interruption event since driver software on the computer automatically detects the camera's connection and displays the camera's user interface on the computer's monitor; see col. 6, line 55 – col. 7, line 41) and effecting a display in which said print setting instruction is reflected to the image data received in said image data receiving step (i.e. in figure 12, the color balance is adjusted by receiving instructions that change the printing settings of the image data in the PC. The display of the computer is updated with the changing of the attributes of the image and the image is confirmed on the monitor of the PC; see col. 9, lines 12-41), and

updating the preview display in accordance with a change of image setting (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images; see fig. 12; col. 9, lines 12-41) corresponding to the interruption event received from said external operating apparatus (i.e. the print setting that is changed in the system corresponds to the image data and the data connection detection of the camera to the PC. Therefore, the change of the image data settings that can be printed corresponds to the image data sent to the PC in the data connection; see col. 9, lines 12-41).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have the method step of receiving the interruption event from said external operating apparatus and effecting a display in which said print setting instruction is reflected to the image data received in said image

data receiving step, and updating the preview display in accordance with a change of image setting incorporated in the device of Ohtsuka '526, as combined with the features of Nishio '346, in order to have a user confirm an image on a display of an image processing apparatus sent from a digital camera (as stated in Niikawa '500 col. 2, lines 8-16).

Re claim 15: Ohtsuka '526 discloses a method of controlling an information processing apparatus which can communicate with an external operating apparatus including an operation panel which receives a print setting instruction from a user, an operation panel controller for generating an interruption event corresponding to the print setting instruction each time the print setting instruction is made to said operation panel, reading means for reading out image data from a connected storage medium and a printer, said method comprising the steps of:

receiving the image data (i.e. the order receiving unit (1), which receives image data, also receives a signal of an event to represent the printing of data and either to print or not to print the print data that is input into the system; see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35-66, col. 9, lines 1, 2 and col. 10, lines 17-33);

said print setting instruction is reflected to the image data received in said receiving step (i.e. when the order receiving unit (1) receives the image and order files (9 and 10), the print settings, such as the print size or quantities or trimming of the image is carried out on the image data. The image processing is specified by the tag information (8) and is reflected on the image data received by the order receiving

apparatus (1), considered as the host computer; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33); and

generating print data corresponding to the print setting instruction (i.e. the order information instructs the printer to generate print data corresponding to the order information (12) specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user. The print setting instruction is analogous to the order file (10) because the order file specifies how many copies are to be produced or the size of paper used in printing the print data; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33) and

outputting the generated print data to said printer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33).

However, Ohtsuka '526 fails to teach effecting a preview display.

However, this is well known in the art as evidenced by Nishio '346. Nishio '346 discloses effecting a preview display (i.e. the CPU (150) transmits, or outputs,

processed image data to a monitor (14) in order to be shown to the user, or preview displayed. In the background of the invention, in order to confirm the result of image processing, the image is preview displayed, or simply displayed on a CRT display to the user. With the incorporation of the CPU (150) that controls the output of the image to the monitor (14) and the display of an image to confirm the result of image processing of Nishio '346 combined with the features of Ohtsuka '526, the above claim feature is performed; see figs. 1, 2 and 6; see paragraphs [0004], [0035] and [0058]-[0060]).

Therefore, in view of Nishio '346, it would have been obvious to one of ordinary skill at the time the invention was made to effect a preview display in order to confirm the result of image processing by displaying the image processed (as stated in Nishio '346 paragraph [0004).

However, Ohtsuka ‘526 in view of Nishio ‘346 fails to teach receiving the interruption event; effecting a preview display in which said print setting instruction is reflected to the image data received in said receiving step; and said print data generating step including updating the preview display in accordance with a change of the print setting corresponding to the interruption event received from said external operating apparatus.

However, this is well known in the art as evidenced by Niikawa ‘500. Niikawa ‘500 discloses receiving the interruption event (i.e. in the system, the CPU of the PC (1000) is used to accept a connection of the digital camera to the PC, considered as an interruption event since driver software on the computer automatically detects the

camera's connection and displays the camera's user interface on the computer's monitor; see col. 6, line 55 – col. 7, line 41);

effecting a preview display in which said print setting instruction is reflected to the image data received in said receiving step (i.e. in figure 12, the color balance is adjusted by receiving instructions that change the printing settings of the image data in the PC. The display of the computer is updated with the changing of the attributes of the image and the image is confirmed on the monitor of the PC; see col. 9, lines 12-41); and

said print data generating step including updating the preview display in accordance with a change of the print setting (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images; see fig. 12; col. 9, lines 12-41) corresponding to the interruption event received from said external operating apparatus (i.e. the print setting that is changed in the system corresponds to the image data and the data connection detection of the camera to the PC. Therefore, the change of the image data settings that can be printed corresponds to the image data sent to the PC in the data connection; see col. 9, lines 12-41).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have the method step of receiving the interruption event; effecting a preview display in which said print setting instruction is reflected to the image data received in said receiving step; and said print data

generating step including updating the preview display in accordance with a change of the print setting corresponding to the interruption event received from said external operating apparatus incorporated in the device of Ohtsuka ‘526, as combined with the features of Nishio ‘346, in order to have a user confirm an image on a display of an image processing apparatus sent from a digital camera (as stated in Niikawa ‘500 col. 2, lines 8-16).

Re claim 16: Ohtsuka '526 discloses a program stored on a computer-readable recording medium, for causing a computer to execute a method of controlling a print system comprising an external operating apparatus, a host computer which communicates with said external operating apparatus, and a printer which communicates with said host computer, wherein said method includes a control method for said external operating apparatus and comprises, the steps of:

receiving by an operation panel a print setting instruction from the user (i.e. in the system, the digital camera has an operational panel, which allows the user to see the picture that has been photographed and also allows the user to set order information in regards to the necessity of printing and the quantity of prints desired by the user. The quantity of prints can be considered as the print setting instruction. With the function of setting the above parameters on the digital camera, it is clear that an input is received on the operational panel on the camera to signal a necessity of printing or quantity of printing to the digital camera. The digital camera is considered as an external operating apparatus; see fig. 1; col. 1, lines 18-26 and col. 6, lines 1-56);

generating an interruption event corresponding to the print setting instruction each time the print setting instruction is made to said operation panel (i.e. each time the digital camera (3) is used to perform a certain function, a signal is sent in the CPU of the digital camera system that corresponds to a certain function. This is clear in any computational device, that an interrupt, or signal of some kind, is generated that corresponds with a certain function in the system of a computational device. In the current example of the digital camera, when the function of setting a print necessity is made, a print flag is set to 1 each time a print necessity is made in regards to a picture desired to be printed. This is an example of generating an interruption event when an instruction is made at the digital camera. In regards to the instruction of the quantity of prints that is analogous to the print setting instruction, when the flag of the necessity of printing is set to 1, setting values relating the quantity or size of prints, are selected by a button on the digital camera each time this setting is desired. Once the key is pressed to select a certain setting, this generates an interrupt in the system of the camera signifying that the user has chosen a certain value or setting each time the value or setting is made at the digital camera (3) and the value or setting is stored; see fig. 1; col. 1, lines 18-26 and col. 6, lines 1-56); and

reading out image data from a storage medium (i.e. once the print necessity and other settings are chosen, these settings are also stored as a predetermined number. The digital camera (3) is connected to the personal computer (4). The digital camera (3) generates an image file (9) that is input into the personal computer (4). This is an example a reading means that reads out image data from a storage medium since the

information of the necessity of printing and other print settings are stored before these printing options and settings are sent to the personal computer (4) in an image file (9). Also, since the personal computer (4) also has an operational panel that is able to manipulate the image file by configuring print settings through inputs in the system, the personal computer can also be considered as an external operation apparatus. The personal computer (4) can temporarily store the image file (9) and order file (10) and transfer this information to the order receiving apparatus (1). This is an example of having a means to transfer, or read out, image data that is stored in a storage medium; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33),

wherein said method further includes a control method for said host computer and comprises the steps of:

receiving the image data read out from said storage medium (i.e. in the system both the personal computer (4) and the order receiving apparatus (1) can be considered as a host computer. The personal computer (4) is able to receive image data that is transmitted from the digital camera. The input from the digital camera relates to information that was stored as a predetermined value before the information was transmitted to the personal computer (4). Also, in regards to the order receiving apparatus, the order receiving apparatus (1) receives image data read out from a storage medium (5) that stores the image data, order information and the print necessity flag that signifies if printing is needed. In the method of using the order receiving apparatus (1), instead of using the storage medium (5), the image data can be

transmitted from a storage medium that temporarily stores the image data; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33), and

generating print data corresponding to the print setting instruction (i.e. the order information instructs the printer to generate print data corresponding to the order information (12) specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user. The print setting instruction is analogous to the order file (10) because the order file specifies how many copies are to be produced or the size of paper used in printing the print data; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33), and

wherein said method further includes a control method for said printer by which said printer prints the print data output from said host computer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33).

However, Ohtsuka '526 fails to teach effecting a preview display.

However, this is well known in the art as evidenced by Nishio '346. Nishio '346 discloses effecting a preview display (i.e. the CPU (150) transmits, or outputs, processed image data to a monitor (14) in order to be shown to the user, or preview displayed. In the background of the invention, in order to confirm the result of image processing, the image is preview displayed, or simply displayed on a CRT display to the user. With the incorporation of the CPU (150) that controls the output of the image to the monitor (14) and the display of an image to confirm the result of image processing of Nishio '346 combined with the features of Ohtsuka '526, the above claim feature is performed; see figs. 1, 2 and 6; see paragraphs [0004], [0035] and [0058]-[0060]).

Therefore, in view of Nishio '346, it would have been obvious to one of ordinary skill at the time the invention was made to effect a preview display in order to confirm the result of image processing by displaying the image processed (as stated in Nishio '346 paragraph [0004).

However, Ohtsuka ‘526 and Nishio ‘346 fails to teach receiving the interruption event from said external operating apparatus and effecting a preview display in which said print setting instruction is reflected to the image data received in said image data receiving step; updating the preview display in accordance with a change of the print setting corresponding to the interruption event received from said external operating apparatus.

However, this is well known in the art as evidenced by Niikawa ‘500. Niikawa ‘500 discloses receiving the interruption event from said external operating apparatus (i.e. in the system, the CPU of the PC (1000) is used to accept a connection of the

digital camera to the PC, considered as an interruption event since driver software on the computer automatically detects the camera's connection and displays the camera's user interface on the computer's monitor; see col. 6, line 55 – col. 7, line 41) and effecting a preview display in which said print setting instruction is reflected to the image data received in said image data receiving step (i.e. in figure 12, the color balance is adjusted by receiving instructions that change the printing settings of the image data in the PC. The display of the computer is updated with the changing of the attributes of the image and the image is confirmed on the monitor of the PC; see col. 9, lines 12-41);

updating the preview display in accordance with a change of the print setting (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images; see fig. 12; col. 9, lines 12-41) corresponding to the interruption event received from said external operating apparatus (i.e. the print setting that is changed in the system corresponds to the image data and the data connection detection of the camera to the PC. Therefore, the change of the image data settings that can be printed corresponds to the image data sent to the PC in the data connection; see col. 9, lines 12-41).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have the method step of receiving the interruption event from said external operating apparatus and effecting a preview display in which said print setting instruction is reflected to the image data received in said image data receiving step; updating the preview display in accordance with a

change of the print setting corresponding to the interruption event received from said external operating apparatus incorporated in the device of Ohtsuka ‘526, as combined with the features of Nishio ‘346, in order to have a user confirm an image on a display of an image processing apparatus sent from a digital camera (as stated in Niikawa ‘500 col. 2, lines 8-16).

Re claim 18: Ohtsuka '526 discloses A program stored on a computer-readable medium, for causing a computer to execute a method of controlling an information processing apparatus which can communicate with an external operating apparatus including an operation panel which receives a print setting instruction from a user, an operation panel controller for generating an interruption event corresponding to the print setting instruction each time the print setting instruction is made to said operation panel, and reading means for reading out image data from a connected storage medium and a printer, said method comprising the steps of:

receiving the image data (i.e. the order receiving unit (1), which receives image data, also receives a signal of an event to represent the printing of data and either to print or not to print the print data that is input into the system. The flag or signal indicating to print is analogous to an interruption event that causes an a specific action to occur in the system; see fig. 1; col.6, lines 1-66, col. 7, lines 1-66, col. 8, lines 35-66, col. 9, lines 1, 2 and col. 10, lines 17-33);

said print setting instruction is reflected to the image data received in said receiving step (i.e. when the order receiving unit (1) receives the image and order files

(9 and 10), the print settings, such as the print size or quantities or trimming of the image is carried out on the image data. The image processing is specified by the tag information (8) and is reflected on the image data received by the order receiving apparatus (1), considered as the host computer; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33); and

generating print data corresponding to the print setting instruction (i.e. the order information instructs the printer to generate print data corresponding to the order information (12) specified in the order file (10). Although a print control unit is not specified, the order receiving apparatus (1) is clearly the printer control unit since the instructions for the printer has to be recognized and processed by the order receiving apparatus (1) and the printer is controlled by the apparatus (1) in order to output the desired document of the user. The print setting instruction is analogous to the order file (10) because the order file specifies how many copies are to be produced or the size of paper used in printing the print data; see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33) and

outputting the generated print data to said printer (i.e. the image and order files (9 and 10) are both used to reflect what the user desires to have printed by the printer (2) and this information has been outputted by the order receiving apparatus (1). Since the personal computer (4) sends information to the order receiving apparatus to be printed, this is considered as the host computer that outputted print data to the printer (2); see fig. 1; col. 7, lines 1-66, col. 8, lines 35- 66, col. 9, lines 1, 2 and col. 10, lines 17-33).

However, Ohtsuka '526 fails to teach effecting a preview display.

However, this is well known in the art as evidenced by Nishio '346. Nishio '346 discloses effecting a preview display (i.e. the CPU (150) transmits, or outputs, processed image data to a monitor (14) in order to be shown to the user, or preview displayed. In the background of the invention, in order to confirm the result of image processing, the image is preview displayed, or simply displayed on a CRT display to the user. With the incorporation of the CPU (150) that controls the output of the image to the monitor (14) and the display of an image to confirm the result of image processing of Nishio '346 combined with the features of Ohtsuka '526, the above claim feature is performed; see figs. 1, 2 and 6; see paragraphs [0004], [0035] and [0058]-[0060]).

Therefore, in view of Nishio '346, it would have been obvious to one of ordinary skill at the time the invention was made to effect a preview display in order to confirm the result of image processing by displaying the image processed (as stated in Nishio '346 paragraph [0004).

However, Ohtsuka ‘526 in view of Nishio ‘346 fails to teach receiving the interruption event; effecting a preview display in which said print setting instruction is reflected to the image data received in said receiving step; and said print data generating step including updating the preview display in accordance with a change of the print setting corresponding to the interruption event received from said external operating apparatus.

However, this is well known in the art as evidenced by Niikawa ‘500. Niikawa ‘500 discloses receiving the interruption event (i.e. in the system, the CPU of the PC

(1000) is used to accept a connection of the digital camera to the PC, considered as an interruption event since driver software on the computer automatically detects the camera's connection and displays the camera's user interface on the computer's monitor; see col. 6, line 55 – col. 7, line 41);

effecting a preview display in which said print setting instruction is reflected to the image data received in said receiving step (i.e. in figure 12, the color balance is adjusted by receiving instructions that change the printing settings of the image data in the PC. The display of the computer is updated with the changing of the attributes of the image and the image is confirmed on the monitor of the PC; see col. 9, lines 12-41); and

said print data generating step including updating the preview display in accordance with a change of the print setting (i.e. in the PC, the monitor is updated in the change of the display when the color balance is adjusted in the system. The monitor of the PC being updated occurs in order to confirm the setting changes on the images; see fig. 12; col. 9, lines 12-41) corresponding to the interruption event received from said external operating apparatus (i.e. the print setting that is changed in the system corresponds to the image data and the data connection detection of the camera to the PC. Therefore, the change of the image data settings that can be printed corresponds to the image data sent to the PC in the data connection; see col. 9, lines 12-41).

Therefore, in view of Niikawa '500, it would have been obvious to one of ordinary skill at the time the invention was made to have the method steps of receiving the

interruption event; effecting a preview display in which said print setting instruction is reflected to the image data received in said receiving step; and said print data generating step including updating the preview display in accordance with a change of the print setting corresponding to the interruption event received from said external operating apparatus incorporated in the device of Ohtsuka '526, as combined with the features of Nishio '346, in order to have a user confirm an image on a display of an image processing apparatus sent from a digital camera (as stated in Niikawa '500 col. 2, lines 8-16).

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571)-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. D./
/Chad Dickerson/
Examiner, Art Unit 2625

***/Twyler L. Haskins/***
***Supervisory Patent Examiner, Art Unit 2625***